



1004374.032902

#EJ

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Figure 1

Met Ile Phe Gly Val Asn Thr Arg Gln Asn Leu Asp His Val Lys Glu Ser Lys Thr Gly Ser Ser Gly Ile Ile Val Arg Leu Ser Thr 30  
 Asn His Phe Arg Leu Thr Ser Arg Pro Gln Trp Ala Leu Tyr Gln Tyr His Ile Asp Tyr Asn Pro Leu Met Glu Ala Arg Arg Leu Arg 60  
 Ser Ala Leu Leu Phe Gln His Glu Asp Leu Ile Gly Lys Cys His Ala Phe Asp Gly Thr Ile Leu Phe Leu Pro Lys Arg Leu Gln Gln 90  
 Lys Val Thr Glu Val Phe Ser Lys Thr Arg Asn Gly Glu Asp Val Arg Ile Thr Ile Thr Leu Thr Asn Glu Leu Pro Pro Thr Ser Pro 120  
 Thr Cys Leu Gln Phe Tyr Asn Ile Ile Phe Arg Arg Leu Leu Lys Ile Met Asn Leu Gln Gln Ile Gly Arg Asn Tyr Tyr Asn Pro Asn 150  
 Asp Pro Ile Asp Ile Pro Ser His Arg Leu Val Ile Trp Pro Gly Phe Thr Thr Ser Ile Leu Gln Tyr Glu Asn Ser Ile Met Leu Cys 180  
 Thr Asp Val Ser His Lys Val Leu Arg Ser Glu Thr Val Leu Asp Phe Met Phe Asn Phe Tyr His Gln Thr Glu Glu His Lys Phe Gln 210  
 Glu Gln Val Ser Lys Glu Leu Ile Gly Leu Val Val Leu Thr Lys Tyr Asn Asn Lys Thr Tyr Arg Val Asp Asp Ile Asp Trp Asp Gln 240  
 Asn Pro Lys Ser Thr Phe Lys Lys Ala Asp Gly Ser Glu Val Ser Phe Leu Glu Tyr Tyr Arg Lys Gln Tyr Asn Gln Glu Ile Thr Asp 270  
 Leu Lys Gln Pro Val Leu Val Ser Gln Pro Lys Arg Arg Gly Pro Gly Gly Thr Leu Pro Gly Pro Ala Met Leu Ile Pro Glu Leu 300  
 Cys Tyr Leu Thr Gly Leu Thr Asp Lys Met Arg Asn Asp Phe Asn Val Met Lys Asp Leu Ala Val His Thr Arg Leu Thr Pro Glu Gln 330  
 Arg Gln Arg Glu Val Gly Arg Leu Ile Asp Tyr Ile His Lys Asn Asp Asn Val Gln Arg Glu Leu Arg Asp Trp Gly Leu Ser Phe Asp 360  
 Ser Asn Leu Leu Ser Phe Ser Gly Arg Ile Leu Gln Thr Glu Lys Ile His Gln Gly Gly Lys Thr Phe Asp Tyr Asn Pro Gln Phe Ala 390  
 Asp Trp Ser Lys Glu Thr Arg Gly Ala Pro Leu Ile Ser Val Lys Pro Leu Asp Asn Trp Leu Leu Ile Tyr Thr Arg Arg Asn Tyr Glu 420  
 Ala Ala Asn Ser Leu Ile Gln Asn Leu Phe Lys Val Thr Pro Ala Met Gly Met Gln Met Arg Lys Ala Ile Met Ile Glu Val Asp Asp 450  
 Arg Thr Glu Ala Tyr Leu Arg Val Leu Gln Gln Lys Val Thr Ala Asp Thr Gln Ile Val Val Cys Leu Leu Ser Ser Asn Arg Lys Asp 480  
 Lys Tyr Asp Ala Ile Lys Lys Tyr Leu Cys Thr Asp Cys Pro Thr Pro Ser Gln Cys Val Val Ala Arg Thr Leu Gly Lys Gln Thr 510

Figure 1  
 Continued

Val Met Ala Ile Ala Thr Lys Ile Ala Leu Gln Met Asn Cys Lys Met Gly Gly Glu Leu Trp Arg Val Asp Ile Pro Leu Lys Leu Val	540
Met Ile Val Gly Ile Asp Cys Tyr His Asp Met Thr Ala Gly Arg Ser Ile Ala Gly Phe Val Ala Ser Ile Asn Glu Gly Met Thr	570
Arg Trp Phe Ser Arg Cys Ile Phe Gln Asp Arg Gly Gln Glu Leu Val Asp Gly Leu Lys Val Cys Leu Gln Ala Ala Leu Arg Ala Trp	600
Asn Ser Cys Asn Glu Tyr Met Pro Ser Arg Ile Ile Val Tyr Arg Asp Gly Val Gly Asp Gly Gln Leu Lys Thr Leu Val Asn Tyr Glu	630
Val Pro Gln Phe Leu Asp Cys Leu Lys Ser Ile Gly Arg Gly Tyr Asn Pro Arg Leu Thr Val Ile Val Lys Lys Arg Val Asn Thr	660
Arg Phe Phe Ala Gln Ser Gly Gly Arg Leu Gln Asn Pro Leu Pro Gly Thr Val Ile Asp Val Glu Val Thr Arg Pro Glu Trp Tyr Asp	690
Phe Phe Ile Val Ser Gln Ala Val Arg Ser Gly Ser Val Ser Pro Thr His Tyr Asn Val Ile Tyr Asp Asn Ser Gly Leu Lys Pro Asp	720
His Ile Gln Arg Leu Thr Tyr Lys Leu Cys His Ile Tyr Tyr Asn Trp Pro Gly Val Ile Arg Val Pro Ala Pro Cys Gln Tyr Ala His	750
Lys Leu Ala Phe Leu Val Gly Gln Ser Ile His Arg Glu Pro Asn Leu Ser Leu Ser Asn Arg Leu Tyr Tyr Leu	775

**Figure 1**  
**Continued**

PIWI MADDQGRGRRRPLNEDDSSTRSGSGDGPVKVFRGSSSGDPRADPRIEASRERRALEEAPR  
 M F G R L 61  
 HIWI M-----IF-----G-----VNTRQNLHDV--

PIWI REGGPPERKPGWDQYDYLNTRPVELVSKKGTGVPVMLQTNFFRLKTKPEWRIVHYHVEFE  
 K E SK G+ G+ V L TN FRL ++P+W + YH+++ 122  
 HIWI -----K-----E--SKTGSSGIIVRLSTNHFRLTSRPQWALYQYHIDYN

PIWI PSIENPRVRMGVLSNHANLLGSGYLFDFGLQLFTTRKFEQEITVLSGKSKLDIEYKISIKFV  
 P +E R+R +L H +L+G + FDG LF ++ +Q++T + K++ + +I+I 183  
 HIWI PLMEARRLRSALLFQHEDLIGKCHAFDGTILFLPKRLQKQVTEVFSKTRNGEDVRITITLT

PIWI GFISCAEPRFLQVLNLILRRSMKGLNLELVGRNLFDPRAKIEIREFKMELWPGYETSIRQH  
 + P LQ N+I RR +K +NL+ +GRN ++P I+I ++ +WPG+ TSI Q+ 244  
 HIWI NELPPTSPTCLQFYNIIFRLLKIMNLQQIGRNYNPNPDIDIPSHRLVIWPGFTTSILOQ

PIWI EKDILLGTEITHKVMRTETIYDIMRRCSHNPARGH--QDEVVRNVLDLIVLTDYNNRTYRIN  
 E I+L T+++HKV+R+ET+ D M H H Q++V ++ L+VLT YNN+TYR++ 305  
 HIWI ENSIMLCTDVSHKVLRSSETVLDPMFNFYHQTEEHKFQEQVSKELIGLVVLTXYNNKTYRVD

PIWI DVDFGQTPKSTF-SCKGRDISFVEYYLTKYNIRIRDHNPQLLISK-NRDKALKTNASELVV  
 D+D+ Q PKSTF G ++SF+EYY +YN I D QP+L+S+ R + + 366  
 HIWI DIDWDQNPSTFKKADGSEVSFLEYRKYQYQNEITDLKQPVLSQPKRRRGPGGTLPGPAM

PIWI LIPELCRVTLGNAEMRSNFQLMRAMSSYTRMNPQR---TDRLAFNHLQNTPESVKVLRL  
 LIPELC +TGL +MR++F +M+ ++ +TR+ P+QR RL + H+ N LR 427  
 HIWI LIPELCYLTGLTDKMRNDFNMKDLAVHTRLTPEQRQREVGRLLIDYIHKNDNVQ---RELRL

PIWI DWNMELDKNVTEVQGRIGQONIVFHNGKVPAGEN---ADWQRHFRDQRMILTTPSDGLDRW  
 DW + D N+ GRI+ + I H G N ADW + R +++ LD W 488  
 HIWI DWGLSFDSNLLSFSGRILQTEKI--HQGGKTFDYNPQFADWSKETRGAPLISVKP---LDNW

PIWI AVIAPQRNSHELRTLLDSLYRAASGMGLRIRSPQEFIIYDDRTGTYVRAMDDCVSRDPKLI  
 +I +RN +L+ +L++ MG+++R I DDRT Y+R + V +D++++ 549  
 HIWI LLIYTRNRYEAANSILQNLFKVTPAMGMQMRK-AIMIEVDDRTAYLRLVQLQKVTADTQIV

PIWI LCLVPNDNAERYSSIKKRGYVDRAVPTQVVTLKTTKPYLSMSIATKIAIQLNCKLGYTPW  
 CL+ ++ ++Y +IKK D P+Q V +T K ++M+IATKIA+Q+NCK+G W 610  
 HIWI VCLLSSNRKDKYDAIKKYLCTDCPTSPQCQVARTLGKQQTVMATKIALQMNCKMGGELW

PIWI MIELPLSGLMTIGFDIAKSTRDRKRAYGALIASMDLQONSTYFSTVTECSAFDVLANTLWP  
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 HIWI RVDIPLKLVMIIVGIDCYHDMTAGRRSIAGFVASIN-EGMTRWFSRCIFQDRGQELVDGLKV

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 + ALR + + +PSRI+ YRDGV G LK L +EV ++ LK+ P+L 732  
 HIWI CLQAALRAWNSCNEYMPRIIVYRDGVGDGLKTLVNYEVPQFLDCLKSIGRGYN---PRL

PIWI AYIVVTRSMNTRFFLNG----QNPPPGTIVDDVITLPERYDFYLVSSQQVRQGTVSPTSYNV  
 IVV + +NTRFF QNP PGT++D +T PE YDF++VSQ VR G+VSPT YNV 793  
 HIWI TVIVVKKRVNTRFFAQSGGRLQNPLPGTVIDVEVTRPEWYDFFIVSQAVRSGSVSPHTYNV

PIWI LYSSMGLSPEKMQLTYKMCHLYYNWSGTTRVPAVCQYAKKLATLVGTNLHSIPQNALEK  
 +Y + GL P+ +Q+LYK+CH+YYNW G RVPA CQYA KLA LVG ++H P +L 854  
 HIWI IYDNSGLKPDHIQRLTYKLCHIYYNWPGVIRVPAPCQYAHKLAFLVGQSIHREPNSLSN

PIWI KFYLL  
 + YLL 859  
 HIWI RLYLL

Figure 1  
Continued

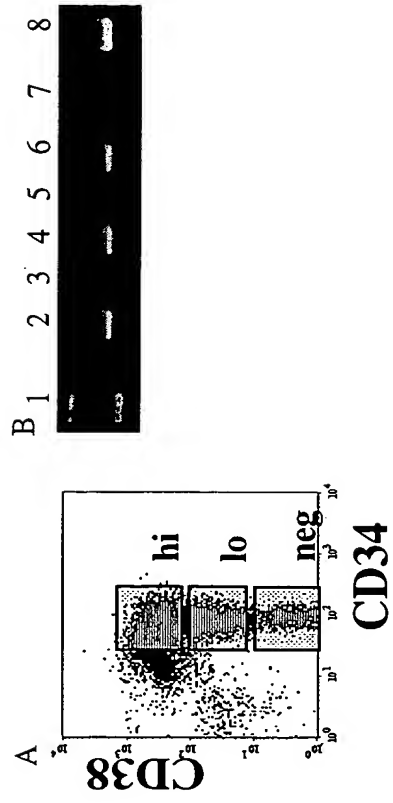
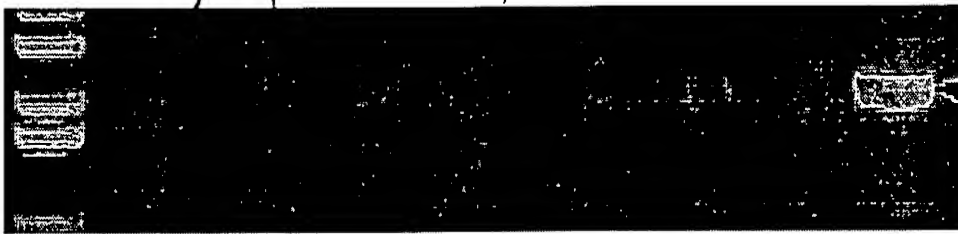


Figure 2



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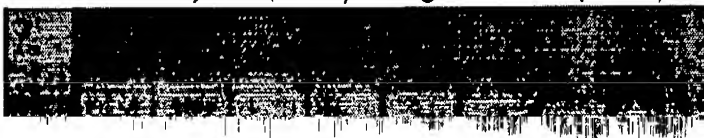


2.3 kb

B 1 2 3 4 5 6



C 1 2 3 4 5 6 7 8 9



142 bp

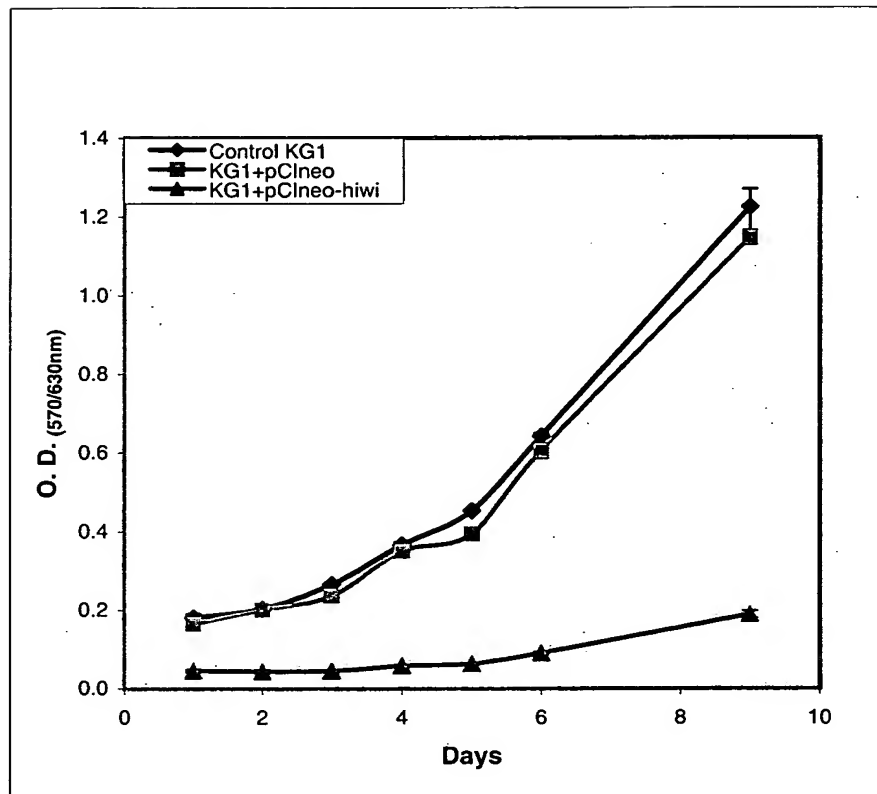


Figure 4

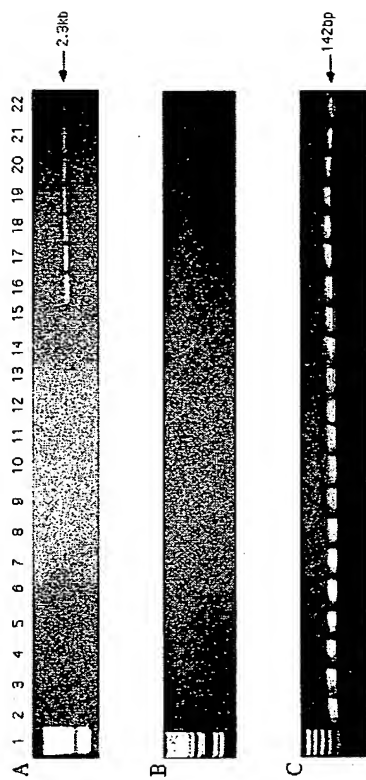
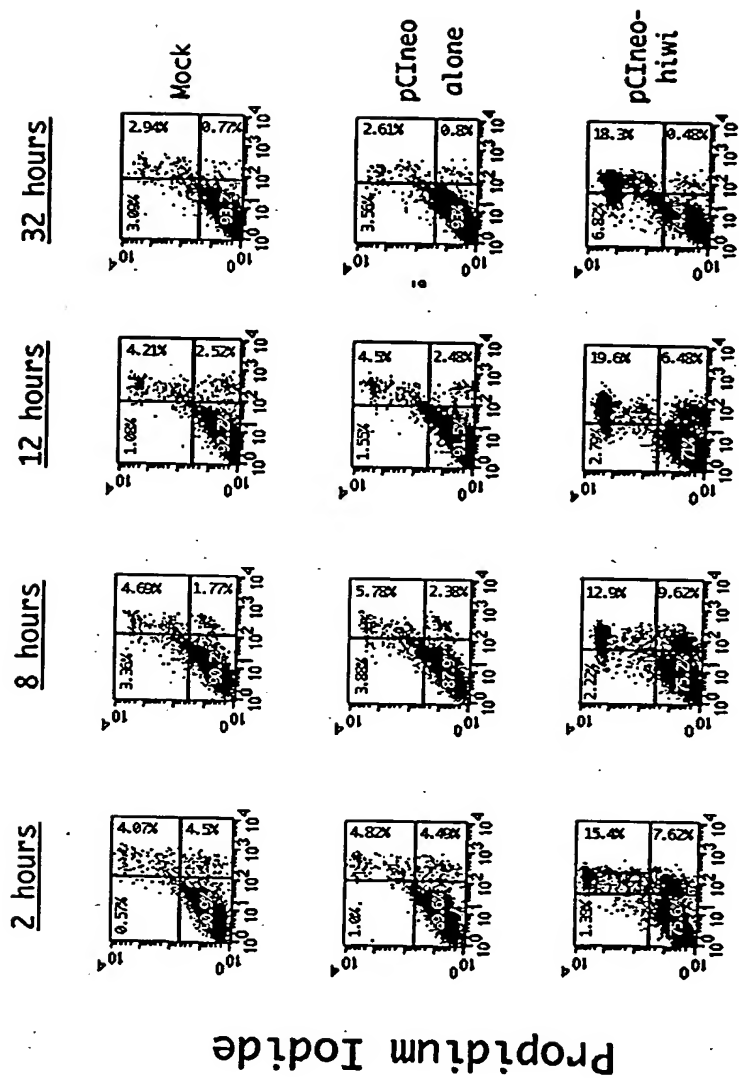


Figure 5



Annexin V

Figure 6

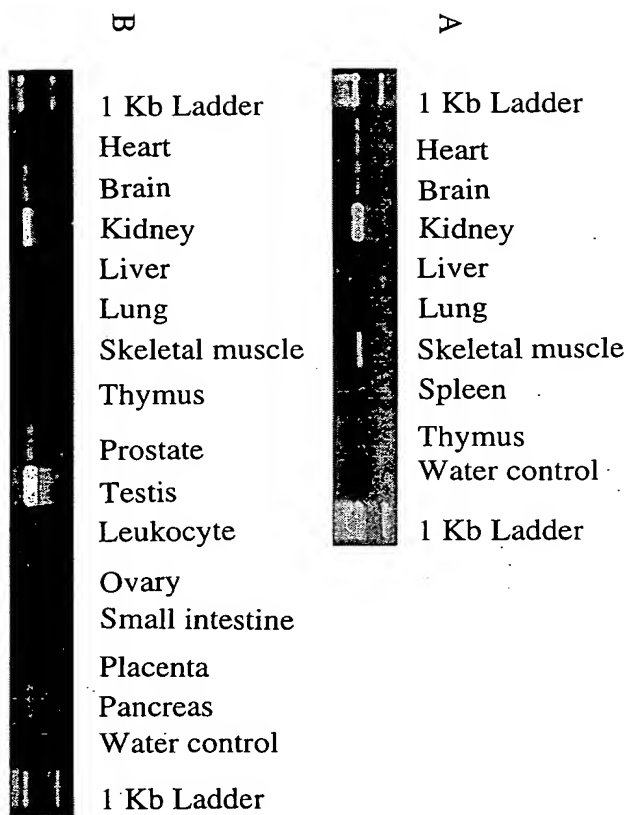


Figure 7



Figure 8

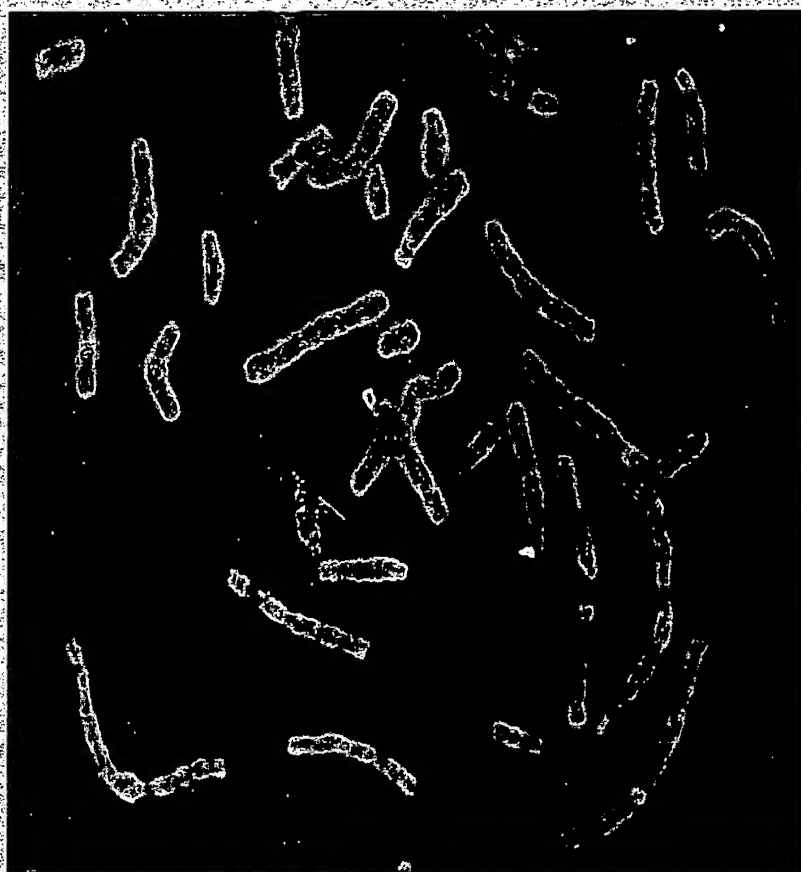
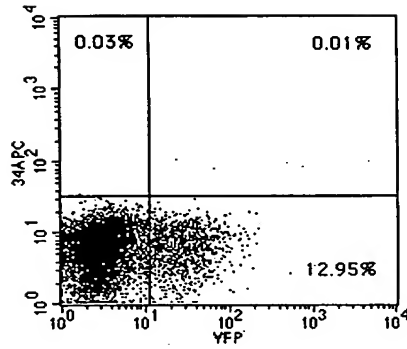
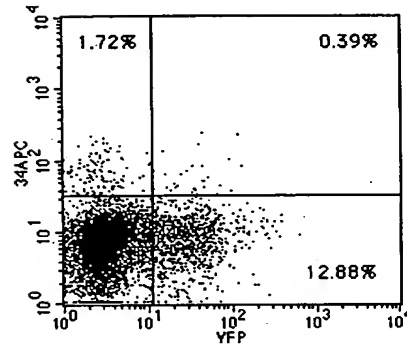


Figure 9

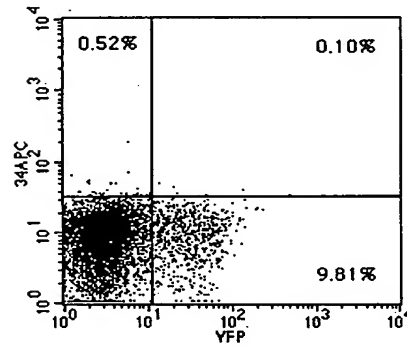
Hiwi Isotype Control



Hiwi CD34/YFP



Empty Vector Isotype Control



Empty Vector CD34/YFP

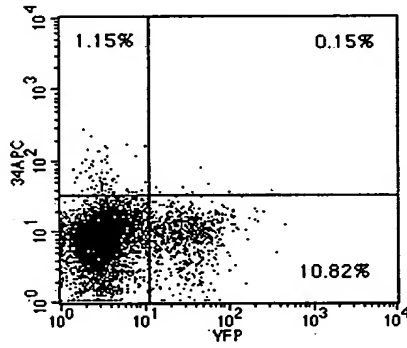


Figure 10